

Fermi Gamma-ray Space Telescope Science Overview

David J. Thompson

NASA Goddard Space Flight Center

After more than 2 years of science operations, the Fermi Gamma-ray Space Telescope continues to survey the high-energy sky on a daily basis. In addition to the more than 1400 sources found in the first Fermi Large Area Telescope Catalog (1FGL), new results continue to emerge. Some of these are: (1) Large-scale diffuse emission suggests possible activity from the Galactic Center region in the past; (2) a gamma-ray nova was found, indicating particle acceleration in this binary system; and (3) the Crab Nebula, long thought to be a steady source, has varied in the energy ranges seen by both Fermi instruments.